Central Intelligence Agency



Washington, D. C. 20505

## DIRECTORATE OF INTELLIGENCE

31 July 1985	
Market Rationale for Low Semicon Exports to Japan	nductor 25X1
Summary	
US semiconductor manufacturers have market share in Japan than in the rest of and complain that this discrepancy proves still protects its semiconductor industry foreign competition. Our analysis suggest however, that past restrictions on foreign the Japanese market and structural factor for the difference to a greater extent to current trade barriers.	f the world s Tokyo y from sts, gn access to rs account
ow Sales to Japan  Until the mid-1970s, Japanese Government imports and foreign investment in the electro	policy limited onics sector.
This memorandum was prepared by Northeast Asia Division, Office of East Asiar Information available as of 31 July was used preparation. Comments and questions are weld directed to the Chief, Japan Branch, Northeas	in its come and may be
OEA,	25X1
WARNING NOTICE INTELLIGENCE SOURCES AND METHODS INVOLVED	25X1

25X1

25X1

25X1

Although the US share of Japan's semiconductor market $^{\mathbf{1}}$  may be depressed by residual effects of these policies, we believe current market factors play a greater role.

-- Japanese manufacturers have lower production costs for 64K and 256K Dynamic Random Access Memories (DRAMS), the focus of Japanese production, compared with those of US companies. This difference results from their past high levels of plant and equipment investment and more efficient production techniques.

benefit from lower domestic shipping and maintenance costs as well.

- -- In-house consumption reduces the demand for US goods. The largest Japanese producers--such as NEC, Hitachi and Toshiba--are all vertically integrated electronics companies, consuming about 20 percent of their own production in the manufacture of consumer electronics and computers. In addition, many other consumer electronics and office machine manufacturers--the primary end users in Japan--produce semiconductors exclusively for in-house Many of these firms are entering the commercial semiconductor market, further increasing competition.
- -- The strong dollar reduces exports to Japan more than to other countries because competition for market share in Japan is fierce.

## . . Contrast with High Sales Elsewhere

In contrast to US semiconductor firms' delayed entry into the Japanese market, US producers entered West European markets during their formative years. Because this penetration of Europe coincided with the period of US domination of the world semiconductor industry, US firms were able to capture a large market share. Until recently, the Japanese have not attempted to challenge the US dominance in Europe, instead targeting the unrestricted, larger US market. Western Europe has import restrictions--circumvented by US manufacturers through investment--and language barriers that complicate marketing for the Japanese.

US market share in non-European countries--such as Singapore, Hong Kong, and South Korea--is also much higher than in Japan, again because US firms entered these markets before

25X1

25X1

US market share in Japan is 19.1 percent according to the Electronics Industry Association of Japan, whose estimate includes production of US companies in Japan, and 11.4 percent according to the US Semiconductor Industry Association.

25	V	4
20	Л	ı

Sanitized Copy Approved for Release 2010/05/06: CIA-RDP87T00759R000200220034-5

Japan was competi	itive. Japan	ese compani	es do not	appear to find
it profitable to	challenge es	tablished U	S producer	s for these
relatively small	markets, whe	re US firms	have alre	ady established
assembly plants.				

25X1

## Future Trends

Recent Japanese marketing and investment efforts, including construction of manufacturing plants in Germany by Hitachi and Toshiba, and the reentry of European firms into high-volume sectors of the industry could decrease US market share in Europe. As demand for more sophisticated semiconductors expands outside Europe and the United States, Japanese companies may attempt to increase their market share. The outlook for US sales in Japan is less certain. In an effort to reduce trade friction with the United States, some Japanese semiconductor manufacturers, including Hitachi, have announced programs to expand procurement of US-made semiconductors. The results will probably be limited, however, because Japanese producers also have begun to abide by voluntary export restrictions. They are unlikely to concede much of their domestic market share to such offshore procurement programs.

25X1

25X1

Market Rationale for Low Semiconductor Exports to Japan

Distribution

Original - OEA/NAD/Japan 1 - C/OEA/NAD/Korea 1 - C/OEA/NAD/STIB 1 - C/OEA/NAD 1 - C/OEA/China Division 1 - C/OEA/SEA 1 - OEA Production Office 1 - D/OEA 1 - DDI 1 - Executive Director 1 - PDB Staff 1 - NIO/EA 1 - C/PES 25X1 1 - OCR/ISG 1 - NIC Analytic Group 1 - CPAS/ILS 5 - CPAS/IMC/CB 25X1 1 - Patricia Haigh, Department of State 1 - Thomas Hubbard, Department of State 1 - William Brooks, Department of State 1 - Nick Riegg, Department of State 1 - Byron L. Jackson, Department of Commerce 1 - Clyde Prestowitz, Department of Commerce 1 - Tim Houser, Department of Commerce 1 - James Murphy, Office of the USTR 1 - Glen Fukushima, Office of the USTR 1 -25X1 DDI/OEA/NAD/JAPAN/JB/ (31 July 1985)

4